

Plasmid pMRLB.2A Containing Gene Rv0934 (Protein PstS1/Phos1) from *Mycobacterium tuberculosis*

Catalog No. NR-13277

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Contributor and Manufacturer:

NIH - TB Vaccine Testing and Research Materials Contract

Product Description:

NR-13277 is a recombinant expression vector containing *Mycobacterium tuberculosis* gene Rv0934, which encodes a periplasmic phosphate-binding lipoprotein, PstS1 (previously known as PhoS1 or PhoS).^{1,2} Gene Rv0934 was amplified by PCR and cloned into pET15b for expression in *Escherichia coli*. The gene was cloned without a signal sequence. The expressed protein is histidine-tagged and has an observed molecular weight of 38 kDa. The expected purified protein yield from a one liter culture is approximately 0.75 mg.

A plasmid map of NR-13277 is attached.

Note: Plasmid pMRLB.2A contains the gene required for ampicillin (Ap) resistance. The recommended concentration of Ap in culture is 100 µg/mL.

Material Provided:

Each vial contains 1 µg of plasmid DNA in 10 mM Tris-HCl, pH 7.5. The concentration is shown on the Certificate of Analysis.

Packaging/Storage:

NR-13277 was packaged aseptically in cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Plasmid pMRLB.2A Containing Gene Rv0934 (Protein PstS1) from *Mycobacterium tuberculosis*, NR-13277."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Cole, S. T., et al. "Deciphering the Biology of *Mycobacterium tuberculosis* from the Complete Genome Sequence." Nature 393 (1998): 537-544. PubMed: 9634230. Erratum in: Nature 396 (1998): 190-198.
2. MycoBrowser: [Gene Rv0934](#)

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pMRLB2a-MS – Rv0934 – pstS1/phoS1 in pET15b

